

CLAIMS

B WHAT IS CLAIMED

- Sub B1* > 1. A disease gene for rheumatoid arthritis, which is a mutant of protooncogene *Dbl* transcribing an mRNA that encodes the cDNA of which the sequence from the 2679th to 2952nd bases is shown in SEQ ID NO: 1, which disease gene transcribes an mRNA encoding the cDNA of which the region from the 20th to 274th bases in SEQ ID NO: 1 is substituted with the sequence of SEQ ID NO: 2.
- Sub B2* > 2. The cDNA ^B of the disease gene of claim 1.
- 10 > 3. A DNA fragment, which is a part of the disease gene of claim 1 or the cDNA of claim 2, and contains the base sequence of SEQ ID NO: 3.
4. A protein which is an expression product of the disease gene of claim 1, wherein the amino acid sequence of the C-terminal 15 is that shown in SEQ ID NO: 2.
5. A peptide, which is a part of the protein of claim 4, and contains partial sequence of the amino acid sequence shown in SEQ ID NO: 2.
- Sub B3* > 6. An antibody against the protein of claim 4 or the peptide 20 of claim 5.
7. A method for diagnosing rheumatoid arthritis, comprising the detection of the mRNA from the disease gene of claim 1 or the protein of claim 4, in a biological specimen.
8. A method for functionally complementing *Dbl* deficiency.

*Add
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